

wings and keel more or less tinged with purple; wings and keel nearly equal, exceeded by standard: either abortive petaliferous spikes or undeveloped apetalous flowers occur in the axils of some of the petioles: no pods seen.

Specimens seen: NEW JERSEY, Mt. Arlington, *no. 2328, Mackensie*, 26 August, 1906; MISSOURI, Eagle Rock, *Mackensie*, 28 September, 1896.

#### SHORTER NOTES

CORALLORHIZA MACULATA RAFINESQUE. — In *Leaflets* (1: 237. 1906), Professor Greene takes up the name *Cladorhiza maculata* Raf. (*Am. Mo. Mag.* 1: 429. 1817) for the species long known as *Corallorhiza Wisteriana* Conrad (*Journ. Philad. Acad.* 6: 145. 1829), and makes what purports to be the new combination *Corallorhiza maculata*. Rafinesque's description, though brief, cannot, as Professor Greene indicates, refer to any other species of the genus in the northeastern states. That Rafinesque first noticed the species in the vicinity of Philadelphia, as Professor Greene surmises, seems doubtful in the light of a second note by Rafinesque, in which he writes:

"*Corallorhiza maculata*. Roots branched, palmate articulate, stem round, sheaths acute; raceme loose, flowers drooping, sepals lanceolate, nearly obtuse, labellum recurved elliptic white, red spotted, auriculated on each side of the base, toothed and obtuse at the apex. \* \* \* This grows in the shady woods of Long Island near Flatbush, Flushing, Oyster-bay, etc.: it blossoms in July and August, the whole plant is yellowish, size about one foot." (*Am. Mo. Mag.* 2: 119. D 1817.) This gives a definite type locality for the species and it would be interesting to know whether the species is still to be found in the localities indicated by him.

HOMER D. HOUSE.

CLEMSON COLLEGE, S. C.

IPOMOEA TRILOBA L. IN THE PHILIPPINES. — In 1837, Blanco described a Philippine plant, which seemed to him distinct from any Linnaean species, as *Convolvulus dentatus*. As this name

was long preoccupied by a species of Vahl, it was changed by Choisy to *Ipomoea Blancoi*, which name has since been used. The compilers of the third edition of the *Flora de Filipinas*, not suspecting the identity of Blanco's species, enumerated and figured it as *I. commutata* Roem. & Schult., to which it is very closely allied. By Choisy, who knew it from the original description only, it was included among the species insufficiently known, but recently abundant material has been collected, and some time ago Mr. Percy Wilson called my attention to its resemblance to the tropical American *I. triloba*. Investigation showed that nearly parallel series of its somewhat wide variations occurred in both regions, and that *I. Blancoi* must be reduced. Hallier has recognized it as American, but apparently without definite identification.

The synonymy as regards Philippine botany, is as follows :

- ✓ *IPOMOEA TRILOBA* L. Sp. Pl. 161. 1753.  
*Convolvulus dentatus* Blanco, Fl. Filip. 89. 1837; ed. 2. 66. 1845; ed. 3. 1: 123. 1877; Walp. Linnaea 16: Litt.-ber. 15. 1842. Not *C. dentatus* Vahl, Symb. Bot. 3: 25. 1794.  
*I. Blancoi* Choisy in DC. Prodr. 9: 389. 1845; Miq. Fl. Ind. Bat. 2: 619. 1857; F.-Vill. Noviss. App. Fl. Philipp. 142. 1883; Merr. Bur. Govt. Lab. Publ. 6: 26. 1904; Merr. loc. cit. 27: 63. 1905. Merr. Philipp. Jour. Sci. 1: Suppl. 119. 1906.  
*I. commutata* Naves in Fl. Filip. ed. 3. pl. 31. 1877; F.-Vill. Noviss. App. Fl. Philipp. 142. 1883. Not *I. commutata* Roem. & Schult. Syst. 4: 228. 1819.  
*I. Batatas* Usteri, Viertel. Naturf. Ges. Zürich 50: 122. 1905. Not *I. Batatas* Poir. Encycl. 6: 14. 1804.

Since, in Asia, this species seems to be confined to the Philippines, there can be no doubt that the original home is in America. But in Blanco's time it was already very common in the former region, so that it must have been introduced at an early date. It is now known there from several collections, those represented in the herbarium of the New York Botanical Garden being :

LUZON: Bauang, Province of Union, *Elmer* 5607, 5726; Manila, *Merrill* 380, 638; Pasig, *Usteri* 564; Los Baños, Province of Laguna, *Williams* 2025, *Elmer* 8271.

MINDORO : Pola, *Merrill* 2450.

In tropical America its range is rather wide, extending from Arizona and southern Florida through Mexico and the West Indies to Brazil.

C. B. ROBINSON.

NEW YORK BOTANICAL GARDEN.

A *TILIA* FROM THE NEW JERSEY PLEISTOCENE. — In the Flora of the Amboy Clays, Professor Newberry described a single imperfect leaf from Fish House, N. J., under the name of *Tiliaephyllum dubium*, remarking that it was very distinct from any other plant yet found in the Amboy Clays and that it resembled some leaves of the basswood, such as could be collected in almost any forest.

In the Annual Report of the State Geologist of New Jersey for 1896, the year that Newberry's monograph was finally issued, Mr. Lewis Woolman discusses in great detail the stratigraphy of the Fish House clays and their fossils, conclusively showing that the dark clays at Fish House are of Pleistocene age and not Cretaceous, as they had been regarded by Lea, Whitfield, Uhler, Newberry, and others. However, the Cretaceous is directly beneath these Pleistocene clays, and at the present time the floor of the pit consists of a somewhat indurated layer forming the contact with what is now called the Magothy Formation of Upper Cretaceous age, but which in Newberry's day was not differentiated from the Amboy Clays or Raritan Formation. Since the lighter Cretaceous clays underlie the dark Pleistocene clays at this point it was not possible for Woolman to determine from which bed the basswood leaf had come, as no additional specimens were found by him, the presumption being, however, that it came from the Pleistocene.

During the past year or two the writer has visited this most interesting locality as occasion has offered, each time making a careful search for plant fossils. It cannot be said that such search proved very successful. A fragmentary maple leaf (*Acer*) was collected at one point, and the clay was found to contain in places a large number of seeds, of which only the gum (*Nyssa*) has thus far been definitely recognized. Fortunately, however,

several imperfect specimens of Newberry's leaf were found, which were characteristic enough to prove that it had come originally from the Pleistocene and is not a member of the Cretaceous flora.

The recognizable plant remains are contained in an interbedded stratum of very compact clay, which is considerably lighter in color than the bulk of the clay and dries to a buff-drab color. The horizon is the same as that carrying the abundant *Unios* and *Anodontas* for which the locality is famous. The largest fragment of a *Tilia* leaf is 12 cm. long and 6.5 cm. wide and lacks the tip and a large part of the margin. Together with the shell of a huge *Anodonta*, or freshwater clam, 15 cm. by 9.5 cm., it forms a cleavage plane in the hard clay, one side of the leaf being concealed by the ventral margin of the clam shell.

It seems desirable that this leaf shall be transferred to the modern genus, and while it undoubtedly represents a still existing species, either *Tilia americana* L. or *Tilia heterophylla* Vent., it has not been possible satisfactorily to determine which, so that Newberry's specific name may stand, at least for the present. This will give us the following as the correct citation for this species :

***Tilia dubia* (Newb.)**

*Tiliaephyllum dubium* Newb. Fl. Amboy Clays, 109. *pl.* 15.  
f. 5. 1896. Woolman, Ann. Rep. State Geol. N. J.  
1896: 212. 1897.

EDWARD W. BERRY.

BALTIMORE, MD.

## REVIEWS

**Henshaw's Mountain Wild Flowers of America\***

This beautifully illustrated book will prove of great interest and usefulness to those who contemplate spending a summer vacation in the higher mountainous regions of North America. What the full-page illustrations of mountain flowers do not supply, when it is desired to identify some interesting alpine plant, the brief, but terse, descriptions will furnish. As the book is intended for the general public, the plants are not arranged scientific-

\* Henshaw, Julia W. Mountain Wild Flowers of America. Pp. i-xxi + 1-384. Pl. 1-99. Ginn & Co., Boston. 1906.